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TRANSPORTATION PERFORMANCE MANAGEMENT NEWSLETTER

Sponsored by AASHTO CPBM and the TPM Pooled Fund with support from FHWA

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Welcome to the inaugural edition of the Transportation Performance Management (TPM) Newsletter, sponsored by the American Association of State Highway and Transportation Officials (AASHTO) Committee on Performance-Based Management (CPBM) in collaboration with Transportation Pooled Fund 5(326), Develop and Support Transportation Performance Management (TPM) Capacity Development Needs for State DOT, known commonly as the TPM Pooled Fund. The TPM Pooled Fund is supported by AASHTO and the Federal Highway Administration (FHWA).

Welcome from the AASHTO CPBM Chair



This has been a roller coaster ride of a year for the transportation community. The COVID-19 pandemic is complex, impacting all transportation agencies and forcing each of us to think differently about the services we provide to get people and freight to their destinations. The immediate challenges before us include adapting our organizations in the face of supply and demand swings, changes in traffic volumes, and new organizational risks including dramatically different ways of working. As the pandemic continues we grapple with understanding and addressing its effects. I invite you to read on as we relaunch the

TPM Newsletter with a focus on this very timely topic – **COVID-19: TPM Impacts**. The articles, resources, and events featured in this edition provide perspectives on topics that matter to the TPM community and offer a rich array of capacity-building resources.

Despite its negative impacts, we face this challenging time with a sense of hope. This is an ideal time for the TPM community to build knowledge that improves performance management, leverages COVID-19 learnings, and demonstrates our collective ability to change and to enhance organizational resiliency. In this spirit, the content featured in the Fall 2020 TPM Newsletter include updates on the latest capacity-building training and events, new resources, and tools under development by the TPM Pooled Fund.

I hope you enjoy the articles in this Fall 2020 TPM Newsletter. I look forward to your feedback on this edition and on the topics you would like to see featured in upcoming quarters. Feel free to contact me at tim.henkel@state.mn.us with any feedback or suggestions for future articles.

Tim Henkel
 Chair, AASHTO CPBM



Reliability Target Setting Under Uncertainty

View from a State DOT Perspective

By Subrat Mahapatra, Maryland DOT State Highway Administration



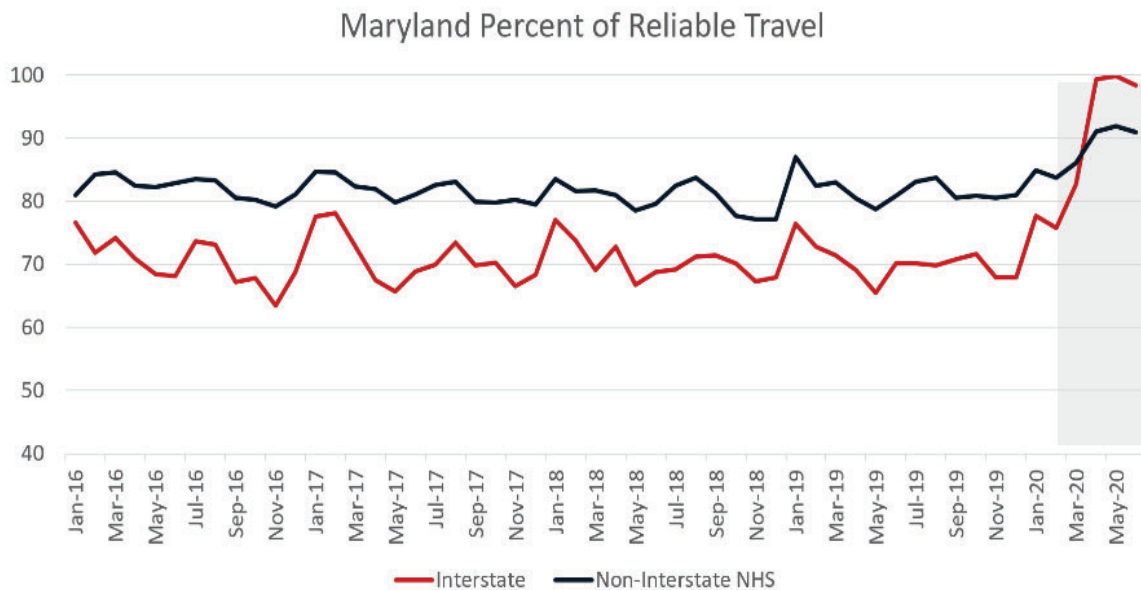
At this critical mid-point in the first set of four-year reliability targets for the Interstate Highway System (IHS) and Non-Interstate National Highway System (NHS), state DOTs assessed and adjusted our four-year targets. Under “normal” circumstances, this mid-period performance evaluation would have been a routine matter requiring minimal intervention or

none at all. However, due to the major outbreak of the COVID-19 pandemic since March 2020, we find ourselves in unprecedented times, which makes forecasting future performance a more challenging exercise than ever before.

The COVID-19 pandemic has impacted every aspect of our lives from all angles (personal, societal, economic) and at all resolutions (local, regional, statewide, national, global). The impacts have been far-reaching and affected personal, public sector, and private sector choices. And these have resulted in significant supply and demand implications of our infrastructure. One of the most visible effects of COVID-19 might be relatively empty roads, where free-flowing peak hour travel has replaced

bumper to bumper traffic. Almost every State DOT has seen a version of the same trends: traffic volumes have been significantly down, transit systems are grossly under-utilized, and crashes have gone down while severe crash rates and commercial vehicle related incidents have seen an uptick. At the same time, it is true that reduced traffic volumes have resulted in stable travel conditions, fewer lane blocking incidents, and the underutilized capacity has resulted in improved reliability of our transportation systems as shown in the figure below. Now, what does this all mean for local transportation agencies, state DOTs and the U.S. DOT? And to bring it back to TPM, how does this influence whether we reassess or revise reliability targets in State DOTs like Maryland DOT?

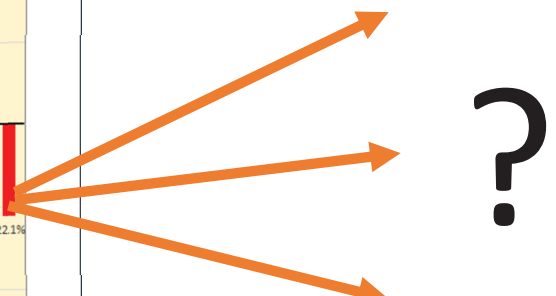
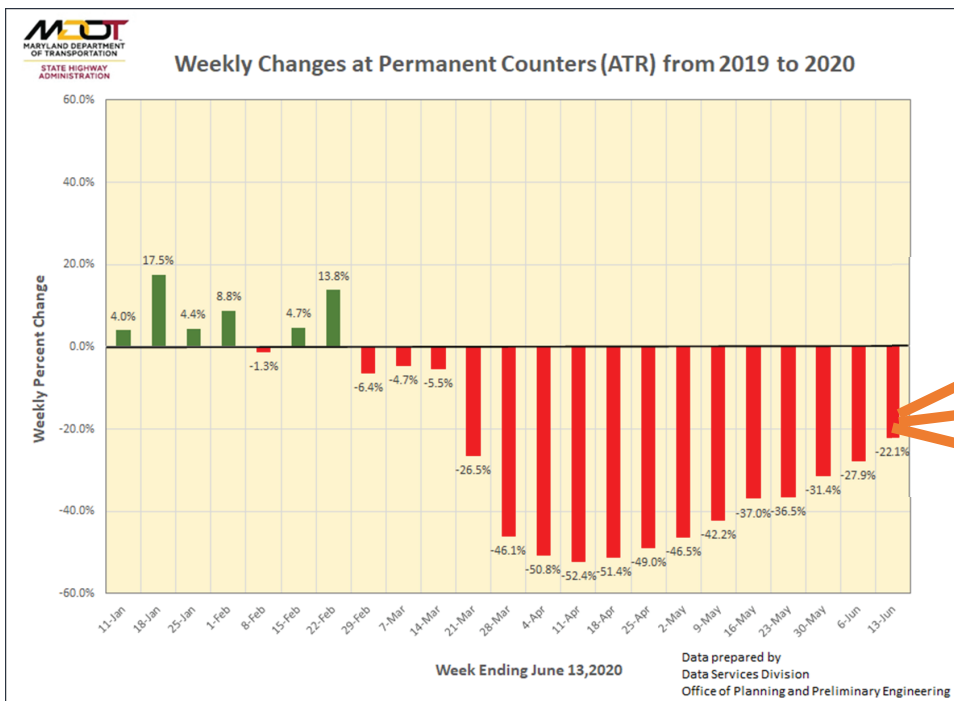
The short-answer? No one knows for sure and there is a huge range of uncertainty that is closely linked to how the pandemic plays out. How long it will take for the health crisis to come under control, what recovery will look like, and what – and how long – it will take the economy to come out of recession are still open questions. On a day-to-day level, decisions about whether schools are going to be in-person or virtual or whether the teleworking model continue to be the “new normal” will have profound implications for our highway system. With Maryland as an example, here is what our State DOT is grappling with:



Source: Maryland DOT

DEMAND UNCERTAINTY

We saw huge traffic drops in the March-May time frame which resulted in very high-levels of system reliability. As shown in the graph below, traffic volumes in spring 2020 dropped by more than 50 percent compared to 2019 conditions. In the past few weeks, volumes have bounced back somewhat but they are still consistently down by 15-20 percent compared to previous years. Peak period travel has seen similar drops, which has resulted in significantly improved peak hour travel speeds, reduced congestion levels and a high degree of reliability. When traffic volumes start going back to pre-COVID conditions, should one expect the congestion and reliability metrics to go back to pre-COVID? But at this point, it is unclear as to what short-term and long-term traffic trends will look like. The ultimate answer will be a function of how safe people feel to travel and the economic engine that can support it.



SUPPLY UNCERTAINTY

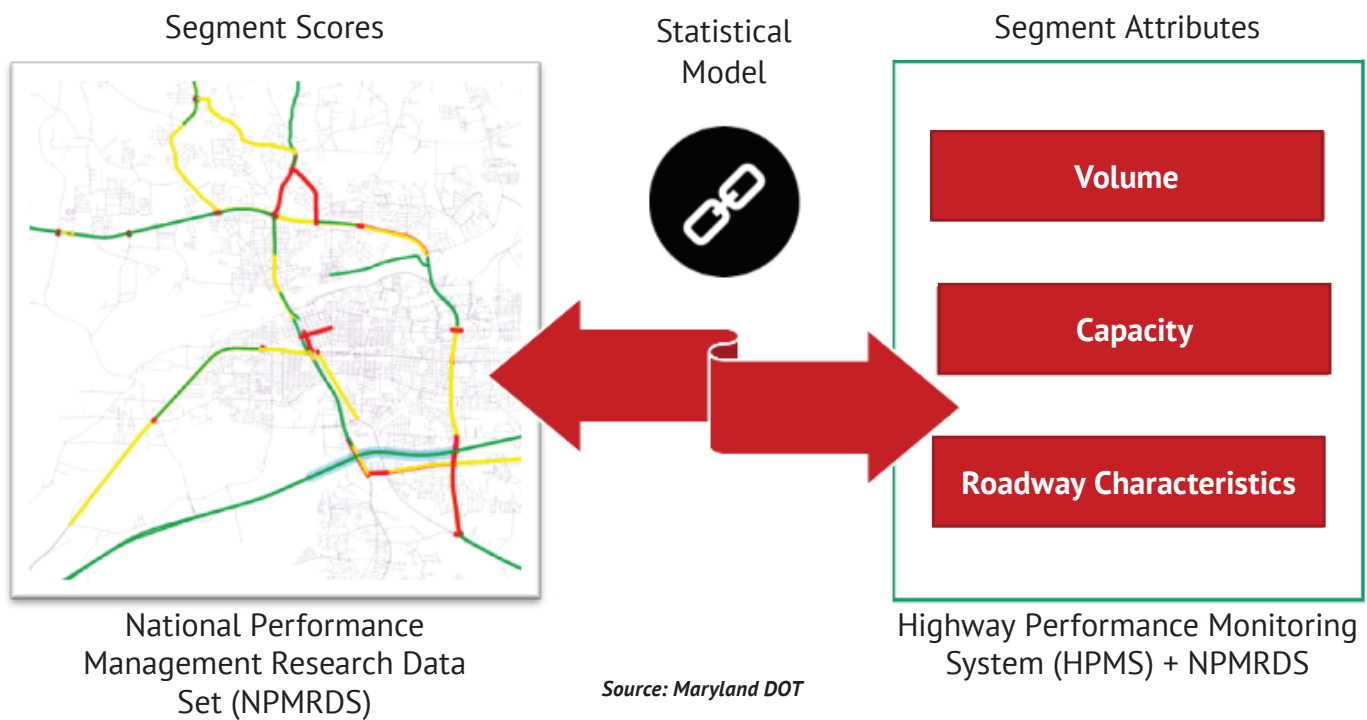
Irrespective of what the stock markets show, we know that there is a long economic recovery ahead of us. State funding shortages would have a negative impact on transportation and operations funding. So, from a supply standpoint, we don't know what reduced funding will do to system performance. Reduced travel means lower vehicle miles traveled on roadways and that translates into reduced fuel taxes and transportation funding. Transit ridership and airport travel are significantly down and so are activities at our Maryland DOT Motor Vehicle Administration; all this means less revenue coming to the transportation trust fund. Maryland's six year transportation program budget has seen significant decreases for these reasons, consistent with reductions in the overall state budget. All this impacts transportation asset management activities, new facilities, projects, as well as Transportation Systems Management and Operations investments.

POLICY & RECOVERY TIME UNCERTAINTY

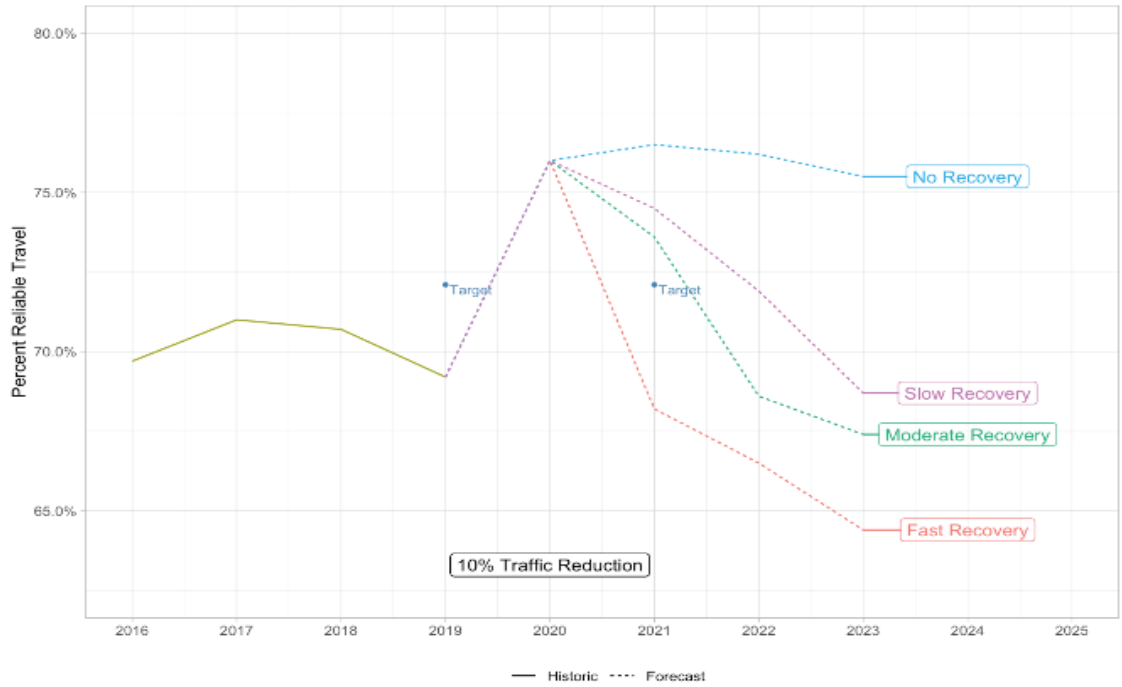
Local, state and federal public health policies and economic stimulus will have a bearing on travel on highways and hence impact the system reliability. I don't think anyone knows how long the recovery will be or what the "new normal" will look like. But these broader economic and health policies that are external to transportation policies will likely have the biggest impact on transportation demand and ensuing performance of the overall system.

RELIABILITY FORECASTING AND REASSESSMENT OF 2021 TARGETS

Maryland DOT has developed statistical models based on the relationship between reliability and factors like volume, capacity and other roadway characteristics that impact reliability. Using a scenario-based approach of transportation supply (new capacity, improved technologies, etc.) and varying demand growth patterns, the agency developed four-year 2021 targets with 2017 as a base year. In light of the above uncertainties and with this opportunity to reassess our 2021 reliability performance measure targets, Maryland DOT recalibrated the models with recent traffic volume and capacity information – including the significant drops on year 2020 due to COVID. Of all the factors that impacted Maryland's reliability scores, the impact of reduced traffic volumes due to the COVID-19 pandemic far outweighed all others. Assuming different scenarios with various rates of recovery (no recovery, slow, moderate, and aggressive recovery), system reliability was computed and compared to 2021 targets originally set. As shown above in the Interstate Reliability figure, except under the most aggressive recovery scenarios, the forecasted system reliability will meet or exceed its current 2021 four-year targets.



INTERSTATE RELIABILITY



Source: Maryland DOT

As shown above in the Interstate Reliability figure, except under the most aggressive recovery scenarios, the forecasted system reliability will meet or exceed its current 2021 four-year targets. It's fair to assume that system reliability will remain at fairly higher levels as traffic volumes get back to pre-COVID levels. This opens up broader policy conversations at the State DOTs as to whether the 2021 four-year targets should be modified to address the reset that has happened in 2020. Due to the ongoing uncertainty and with an assumption that we will have a more stable “new normal” in 2021, it might be prudent to retain the current four year targets as-is. DOTs will be able to keep track of current reliability trends, traffic growth, and recovery patterns – and then use 2020 as a new base to set targets for 2024.



By Famartin - Own work, CC BY-SA 4.0, <https://commons.wikimedia.org/w/index.php?curid=79445399>

PIARC TC 1.1 Performance of Transport Administrations

By Christos Xenophontos (TC 1.1 Chair) and Deanna Belden (TC 1.1 Webmaster)



The World Road Association (known as PIARC) was established in 1909 to exchange knowledge and techniques on roads and road transportation. More than 100 years later and with more than 120 member countries worldwide,

PIARC fosters and facilitates global discussion and sharing knowledge on roads and road transport. Its head office is located in Paris, where its origins began. Subject matter experts from AASHTO, FHWA and TRB serve on PIARC's Technical Committees (TCs). This international collaboration gives agencies a platform to discover and share innovative ways to design, build, operate and maintain transportation infrastructure projects. Members of the AASHTO CPBM currently serve on PIARC's TC 1.1 "Performance of Transport Administrations," TC 1.2 "Planning Road Infrastructure and Transport to Economic and Social Development," TC 2.2 "Accessibility and Mobility in Rural Areas," and TC 3.3 "Asset Management."

The article in this issue is dedicated to TC 1.1 "Performance of Transport Administrations," which held its virtual meeting from September 21-25, 2020. Future articles will touch on the work of other PIARC Technical Committees associated with the CPBM.

Transport administrations must continuously evolve in response to significant social, economic, and environmental shifts. Decision-makers, professionals and organizations in charge of road planning and administration must keep up with the complexities brought by ever-changing demographics, fast-paced urbanization, technological innovation, changing environmental conditions and rapidly evolving customer expectations. To support agencies in meeting these objectives, PIARC's TC 1.1 has focused on three main issues during the current 2019-2023 cycle:

- How road and transport administrations measure the efficiency and effectiveness of customer experience and public value creation
- The role of transport agencies in shaping disruptive technology and service models
- Organization of staff and human resources

The TC is organized into three Working Groups with each of them associated with one of these three main issues. This article provides an introduction, and an invitation to contribute, to each of the three Working Groups.

WORKING GROUP 1

Working Group 1 is focusing on “How Road and Transport Administrations measure the efficiency and effectiveness of Customer Experience and Public Value Creation.” As part of their work, they are focused on the following activities:

- Define and create an understanding of customer experience and public value creation
- Identify existing frameworks aimed at delivering a better customer experience
- Identify current measurement practices
- Determine how community insights assist with asset management levels of service

To better understand how different transportation agencies around the world are tackling these issues, **Working Group 1 is collecting case studies for an upcoming report. If you are interested in completing a case study, please contact Deanna Belden:** deanna.belden@dot.state.mn.us.

WORKING GROUP 2

Working Group 2 is investigating “The Role of Transport Agencies in Shaping Disruptive Technology and Service Models.” Their work is investigating the impact of the sharing economy and other disruptive technologies on the performance of transport administrations and answering questions such as:

- What disruptive technologies and service models are having the greatest potential impact in the transport and mobility sector, in which ways, and over which timescales?
- How well-equipped are transport agencies to manage disruption and change?
- How are agencies adapting their own organizations in response to these emerging technologies?
- What partnerships are emerging, or may be needed, to respond to and drive technological change among sectors, and how should these partnerships be managed to balance multiple interests and deliver shared outcomes?
- What guidance, decision support tools, and other actions are needed to improve agencies’ capacity to track technology trends, respond to and manage change in ways that balance the complex factors at play and deliver public value in relevant, proportionate and appropriate ways?

Working Group 2 has just released a comprehensive survey to inform the group’s work, the development of future transport and mobility concepts, their impact on the transport sector, and how road and transport organizations respond. **On behalf of Working Group 2, we kindly request your cooperation in completing this questionnaire survey by December 4, 2020.** By doing so, you will make a significant contribution to the evidence base, analysis, and final recommendations. The worldwide survey is accessible at www.surveymonkey.com/r/5MBZW62.

WORKING GROUP 3

Working Group 3 is examining and analyzing the “Organization of Staff and Human Resources” within the context of transport administrations. There are good reasons for transport administrations to focus and reflect on all sections of society within their customer base and to mirror this base within their management structures and workforces. Working Group 3 is tasked to identify, investigate and document:

- Organizational issues and effective approaches for defining and promoting diversity and equity
- Effective approaches for recruiting and retaining new talent
- Participation within transport administrations

Working Group 3 is organizing several virtual roundtable discussions to better understand the methods transportation agencies worldwide are using to promote diversity and equity and attract new employees into the profession. The first discussion is scheduled for November 25, 2020 with more to follow. TC 1.1 is also investigating working with the respective TRB Committees to develop a workshop or session during the TRB Annual Meeting 2022 and organize a foresight session on these issues during the World Road Congress in 2023. **Working Group 3 is currently seeking agencies interested in participating in one of the roundtable discussions. To participate, please reach out to Christos Xenophontos:** christos.xenophontos@dot.ri.gov.

For more information on the work of TC 1.1, contact Christos S. Xenophontos or Deanna Belden. Additional information, including publications from previous cycles, can be found at <https://www.piarc.org/en>.

Global Insights: Learning from a Global Pandemic

Article prepared by *Christos Xenophontos* (Assistant Director for Rhode Island DOT and PIARC's TC 1.1 Chair) and *Patrick Mallejacq* (Secretary General of PIARC). It is based on the earlier work published by the PIARC COVID-19 Response Team and referenced here.



Christos Xenophontos



Patrick Mallejacq

Performance management professionals in transportation agencies across the country are coming together to learn from each other, share best practices and build capacity to adapt and keep the doors open for business during these challenging times. But how often do we consider what are we doing to learn from our neighbors around the world about resiliency and emergency management that can help us here on American soil? One way to keep up with what is going on internationally is to follow PIARC – The World Road Association. An international organization with members from over 120 countries, including the United States, PIARC has provided a forum for the analysis and discussion of issues related to roads and road transport and has facilitated the exchange of knowledge and ideas on emerging and critical transport issues around the world since the dawn of the automobile. To hear from U.S. members about the value of engaging with PIARC and its partnership with AASHTO, FHWA, and TRB, click on the link below:

<https://youtu.be/UnjoZ2s3Xwc>.

This TPM Newsletter highlights some valuable PIARC resources developed in response to the pandemic, including webinars, research and best practices.

PIARC reacted quickly to the COVID-19 pandemic and formed a COVID-19 Response Team tasked with the rapid sharing of knowledge and practices between PIARC members. The Response Team organized a series of webinars to share time-sensitive information on actions taken during this crisis by road and transport administrations which could be of use to other jurisdictions. As of October 15, 2020, PIARC had hosted 26 webinars, providing a forum for practitioners and experts to share their experience, knowledge, and successful practices. The webinars provided an overview of the pandemic response in different countries, highlighting issues faced by road operators and administrations, best practices from relevant PIARC reports, and emerging planning, operational, and customer service responses. All

PIARC COVID-19 Response Team



Summary Terms of Reference (Revised PIARC Strategic Plan)

- To explore rapid sharing of knowledge and practice between PIARC members on COVID-19 impacts, responses & associated socio-economic crisis
- To propose and implement short-term actions to support PIARC members and transport professionals in COVID-19 mitigation and response
- To track the course of COVID-19 over time and advise on further actions to be taken by PIARC and others during the crisis and into the recovery
- To advise on medium- and long-term implications of COVID-19 on the roads and transport sector and how these should be reflected in PIARC activities
- To prepare and publish technical reports, surveys and other analysis on COVID-19, alone or in collaboration with other industry bodies & stakeholders

Currently established to **31st December 2021**, extendable as required

Current Membership

- Patrick Mallejacq, Secretary General, PIARC (Chair) (FR)
- Christos Xenophontos, Rhode Island DOT, TC 1.1 Chair (USA)
- José Manuel Blanco Segarra, Ministerio de Transportes, Movilidad y Agenda Urbana, TC 1.1 Spanish Secretary (ES)
- Jonathan Spear, Atkins, TC 1.1 WG 2 Leader (UK)
- Fabio Pasquali, ANAS S.p.A, TC 1.2 Chair (IT)
- Caroline Evans, National Transport Commission, TC 1.4 Chair (AU)
- Yukio Adachi, Hanshin Expressway Engineering Co, TC 1.5 Chair (JP)
- Andrea Simone, University of Bologna, TC 2.1 Chair (IT)
- Luis Miranda-Moreno, TC 2.1 Spanish Secretary (CA)
- Martin Ruesch, Rapp Trans Ltd, TC 2.3 Chair (CH)
- Valentina Galasso, Deloitte Consulting, TC 2.4 Chair (IT)
- Pascal Rossigny, CEREMA, TC 3.3 French Secretary (FR)
- Saverio Palchetti, ANAS S.p.A., TF 3.1 Chair (IT)
- Andrea Peris, Paraguay National Committee (PY)

webinars provided an opportunity for questions and answers. They included a diverse portfolio of presentations from more than 90 speakers from all parts of the world. More importantly, the webinars touched on a number of emerging and rapidly-developing topics such as:

- Alternative approaches and measures taken by road and transport administrations
- Business continuity
- The role of road network operations and ITS
- Consequences and threats to road operators and tolling authorities
- Issues relating to public versus private and individual versus mass transport perspectives
- Impacts on freight, mobility, and resilience

The webinars also provided an opportunity for private sector and supply chain viewpoints, and how companies are being impacted as well as the many public agencies world-wide.

SUMMARY OF KEY EMERGING ISSUES

Based on the webinar series, the following key issues and commonalities have been identified across the topics, countries, and organizations presented:

- General impacts on the road and road transport sector
- Employee health and safety
- Maintaining activity and business continuity
- Impacts on transportation of passengers and goods
- Business relationships
- Collaboration and relationships with customers, stakeholders and other organizations
- Security

The early findings are presented in two PIARC Briefing Notes, which can be downloaded from PIARC's website: www.piarc.org/en The Response Team also published an article in PIARC's quarterly magazine, *Routes and Roads*, and is currently working on a comprehensive report summarizing the initial findings. This report, expected in December 2020, will draw upon input collected from the PIARC webinars and the results of an international survey on the early impacts of the pandemic on the roads and transport sector.

This valuable information and more (reports, briefing notes, video recordings, etc.) is accessible to everyone on PIARC's Special Website on Covid-19 Response accessible at: <https://www.piarc.org/en/News-Agenda-PIARC/Coronavirus-PIARC-and-Covid-19>

Much of this information addresses the immediate actions undertaken during the critical initial phase of the pandemic. However, it will be equally important to share experiences and information once the world's economies begin to reopen and recovery steps commence. The Response Team therefore plans to continue the webinar program to share relevant information and assist in promoting successful practices.

Evaluation of the information collected will be very important. Many countries and operators decided on, and rapidly implemented, urgent measures – we now need to step back and analyze what worked well and what did not, through time-tested evaluation methods. We must also consider customers' and road transport users' expectations. Have they changed? What new policies should be developed? What are the available resources to be put towards these expectations? What is the new revenue situation?

The experience, outcomes, and lessons learned from the COVID-19 crisis will also be reflected in the work of several PIARC Technical Committees and Task Forces and will be incorporated into their work. For example, TC 1.1 will further investigate the impact of COVID-19 on Transport Administrations relative to human resources. TC 1.2 will analyze the impact of the crisis on the economic analysis of road projects. TC 2.3 will share best practices on how to manage freight efficiently in a pandemic situation.

I'd like to end with an excerpt from my introduction at the July 29, 2020 Webinar *PIARC & COVID-19: Lessons Learned So Far: Highlights of the Season of PIARC Webinars on the COVID-19 Crisis*.

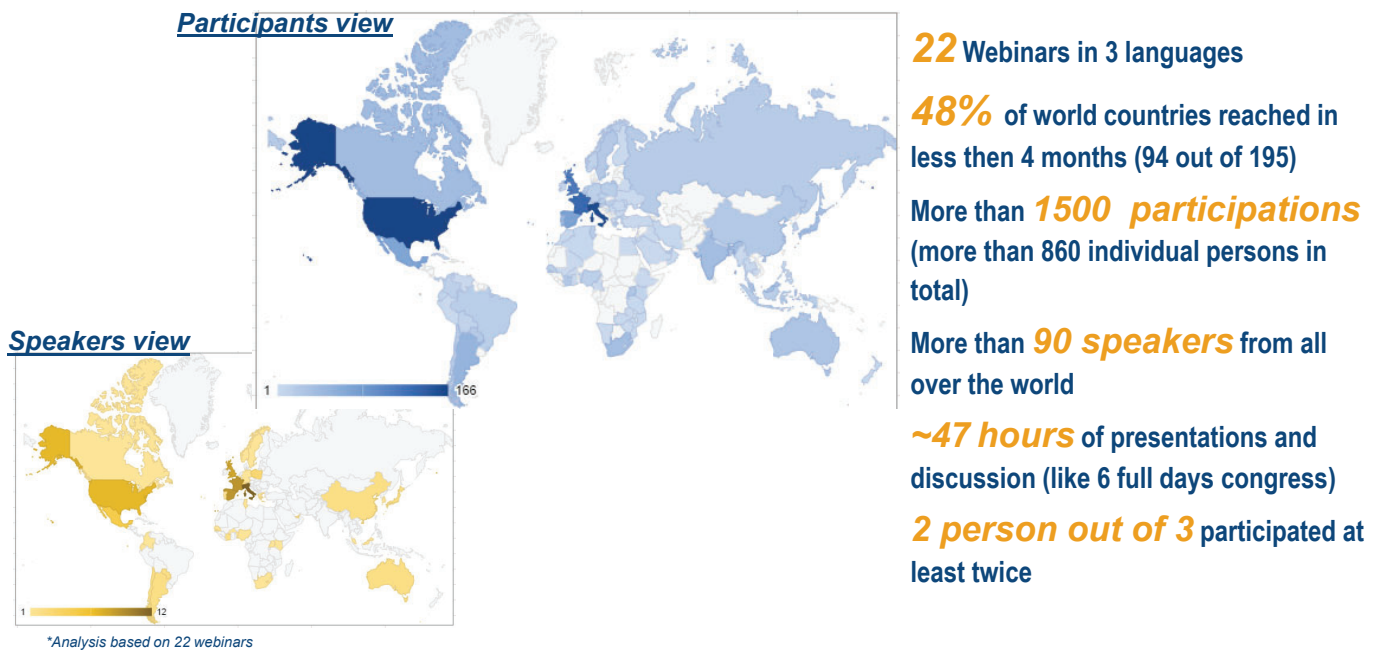
"The road sector will continue to experience impacts, not just in the next few weeks or months, but for much longer. The time is now to reevaluate many of our current practices, rethink our strategies, and reimagine our traditional approaches in order to better address the needs of our customers. If we thought before the pandemic that the needs of our customers were quickly evolving with the emergence of new, disruptive technologies and models, the reality we are in right now and the new norm that is going to reemerge after the pandemic is over will require new, creative solutions."

For more information:

PIARC – The World Road Association www.piarc.org

PIARC COVID-19 site: <https://www.piarc.org/en>

PIARC & COVID-19: Strong Participation Worldwide



COVID-19 Survey Results Show Variance Among States in Data Available to Answer Pandemic Questions

By Daniela Bremmer, Washington State DOT, Chair, AASHTO Joint Subcommittee on System Mobility and Emerging Technologies (SMET).



Daniela Bremmer

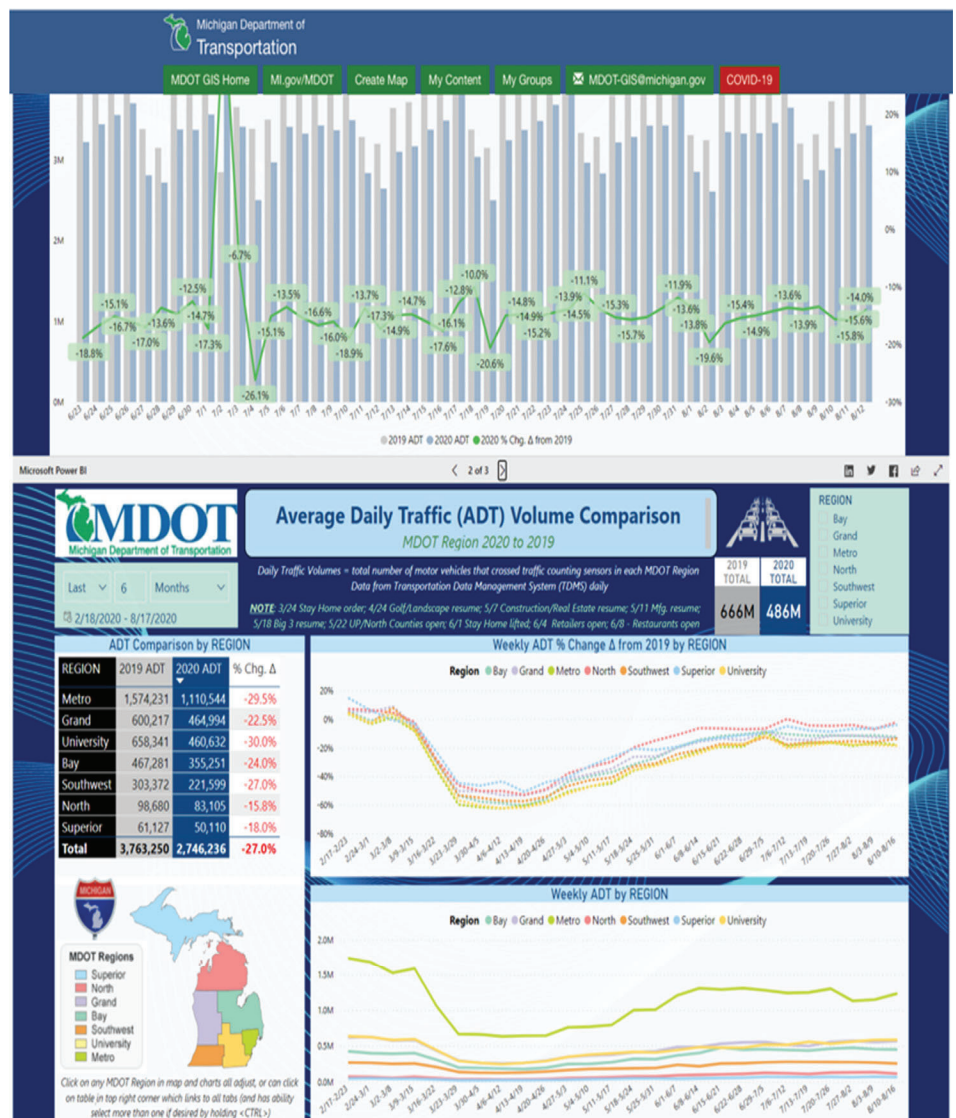
The results are in from a recent AASHTO survey *State DOT COVID-19 Response Survey: Use of Transportation Data and Information for Decision Makers*. The survey focuses on the uses of traditional systems data such as volume, speed, and classification to inform policy responses to COVID-19. The information gathered from the survey is intended to help state DOTs and other transportation stakeholders identify and address data needs related to the current crisis. The survey, jointly sponsored by the AASHTO CPBM and Committee on Transportation System Operations' (CTSO) Joint Subcommittee on System Mobility and Emerging Technologies (SMET) and the AASHTO Committee on Planning, was open from March 25, 2020 to April 22, 2020. Responses were received from state DOTs and MPOs in 37 states and the District of Columbia.

According to SMET Chair Daniela Bremmer, “The survey showed that the pandemic provided DOTs a unique opportunity to leverage traditional data for non-traditional decision making processes. This further highlighted the importance of good system and operational performance data and its analysis and management.”

SIGNIFICANT FINDINGS FROM THE SURVEY INCLUDE:

- Systems data are most typically used as an indicator of economic activity
- Systems data have been used to track the effectiveness and impact of “stay at home” orders
- Not all states have the ability to track trends, particularly with regard to truck traffic or real-time data access

While respondents were split on whether their data needs are being met, survey comments indicate that many states have “mechanisms to capture, process or analyze system and traffic data quickly to provide the information needed” to respond to the current situation. Specific needs cited by respondents include enhanced ability to hybridize with probe data, better methods to gather data from data collection devices, and more real-time data related to volume, classification, and origin-destination data.

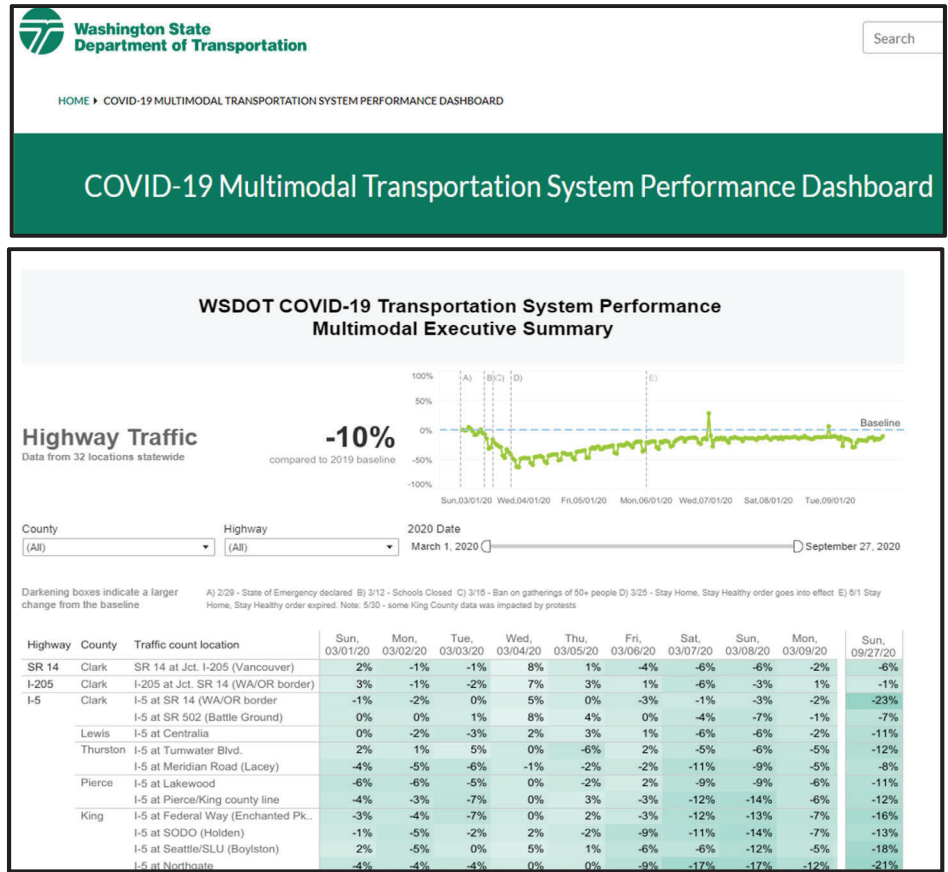


Source: Michigan DOT <https://covid19-mdot.hub.arcgis.com>

Several states provided notable examples of practices they have found successful in responding to COVID-19 data challenges. For example, some states have created COVID-19 system performance dashboards to monitor the performance of various modes, as shown in the Michigan DOT example above and the Washington State DOT example on the right.

The SMET is considering conducting a follow-up survey to investigate the emerging trend of COVID-19 dashboards within State DOTs.

The document summarizing the results of “State DOT COVID-19 Response Survey: Use of Transportation Data and Information for Decision Makers” can be accessed through the [TPM Portal](#).



Source: Washington State DOT
<https://wsdot.wa.gov/about/covid-19-transportation-report>

FREE data related to COVID-19 Impacts

Google: [COVID-19 Community Mobility Reports](#)

INRIX: [National Traffic Volume Synopsis](#)

University of Maryland CATT Lab: [COVID-19 Impact Analysis Platform](#)

Iowa DOT Works to Stabilize, Recover and Grow in Response to COVID-19

By Charlie Purcell, Director, Project Delivery Division, Iowa Department of Transportation



Charlie Purcell

Last year at this time, it would have been impossible to predict we'd be closing out 2020 amid a global pandemic that would impact everything from how we work and communicate to how we serve our transportation customers and ensure the safety of our employees. Recognizing the many ways COVID-19 has transformed our operations, the Iowa DOT's executive leadership team embarked upon an initiative called "Stabilize, Recover, and Grow" to capture what we've learned as we've responded to the crisis. As a result, we have developed a set of recommended actions that will help us continue improving our agency's performance in the future. These actions include permanently adopting some of the temporary changes we've already made, as well as making new changes based on what we've learned over the past seven months.

TO GATHER KEY INSIGHTS, STAFF AND SUPERVISORS WITHIN EACH DIVISION MET TO DISCUSS PROGRESS AND OBJECTIVES IN THREE AREAS:



Stabilize – What changes did we make that helped us continue operating successfully in the midst of a pandemic?



Recover – What additional changes should we make as we transition back to normal or a "new normal?" What changes did we make in response to the pandemic that we should keep permanently?



Grow – What lessons did we learn and how should we use this information to help us be even more resilient and successful in the future?

Staff responses in each of these three areas were largely positive. As we stabilized our operations early on, staff generally felt optimistic about the agency adapting to teleworking, communicating with them, and protecting their safety. They felt that our leadership adapted quickly to keep employees safe and informed. They also responded positively to our ability to move some of our services online quickly. Over half of their responses focused on retaining IT and telework changes, including maintaining a flexible telework policy, providing greater access to virtual meetings, online participation options, and mobile equipment. Staff responses also supported continued communication and worker safety enhancements. As we transition back to normal or a "new normal," staff are looking for policies, processes, and resources to make it easier for some to continue working from home and others to work safely within Iowa DOT buildings and on work sites.

"Stabilize, Recover and Grow" establishes a foundation to make Iowa DOT even more resilient going forward. We learned that we have the tools, methods, and capabilities to work remotely and that we also need to continue investing in technology and mobile work training for staff. But it's not all about the technology; as leaders, we need to keep our communication lines open while balancing the volume of information we provide and understanding the unique range of employee needs and responses to change. Based on the feedback we received from staff, the executive team developed a set of recommendations for action within the broad themes of telework and technology, communication, safety, leadership and supervision, customer service and facilities. Our next steps are to prioritize these recommendations and implement them as part of our current business and strategic planning efforts.

The pandemic has been and continues to be a tremendous challenge for our agency. Even so, the pandemic also presented our agency with a unique opportunity for rapid change. We surprised ourselves by how fast we could learn and adapt to our circumstances – and today Iowa DOT looks ahead to future changes with renewed confidence.

Featured Coronavirus (COVID-19) Transportation Resources

AASHTO Coronavirus Homepage

American Association of State Highway and Transportation Officials (AASHTO)
<https://www.transportation.org/home/covid19>

ACEC Coronavirus Resource Center

American Council of Engineering Companies (ACEC)
<https://www.acec.org/conferences/coronavirus>

Public Transit Responses to Coronavirus or COVID-19

American Public Transportation Association (APTA)
[apta.com/public-transit-response-to-coronavirus/apta-resources](https://www.apta.com/public-transit-response-to-coronavirus/apta-resources)

Coronavirus Resources

American Road & Transportation Builders Association (ARTBA)
<https://www.artba.org/coronavirus>

COVID-19 Update Hub

American Trucking Associations (ATA)
<https://www.trucking.org/COVID19>

Coronavirus (COVID-19) Resources

Associated General Contractors of America (AGC)
<https://www.agc.org/coronavirus>

Freight Railroads & COVID-19

Association of American Railroads (AAR)
<https://www.aar.org/campaigns/freight-railroads-covid-19>

COVID-19 Resources

Association of Metropolitan Planning Organizations (AMPO)
<https://ampopolicy.org/policy/covid-19-resources>

COVID-19 Resource Page

Community Transportation Association of America (CTAA)
<https://ctaa.org/covid-19-resources>

Regional Development Organizations (RDO) COVID-19 Resource Center

National Association of Development Organizations (NADO)
<https://www.nado.org/rdo-covid-19-resource-center>

FHWA Coronavirus (COVID-19) Information & Resources

Federal Highway Administration
<https://www.fhwa.dot.gov/coronavirus>

COVID-19 Transportation Resources

The National Academies of Sciences, Engineering and Medicine (NAS)
[nationalacademies.org/topics/transportation-covid-19-resources](https://www.nationalacademies.org/topics/transportation-covid-19-resources)

Complete List of Relevant Reports (Transportation, Coronavirus Resources)

The National Academies of Sciences, Engineering and Medicine (NAS)
<https://www.nap.edu/search/?collection=94&term=transportation>

NCSL Coronavirus (COVID-19) Resources for States

National Conference of State Legislatures (NCSL)
[ncsl.org/research/health/ncsl-coronavirus-covid-19-resources.aspx](https://www.ncsl.org/research/health/ncsl-coronavirus-covid-19-resources.aspx)

Activities at International Organizations in Relation to COVID-19 Pandemic and Road Transport and Infrastructure

PIARC – World Road Association
www.piarc.org/en/News-Agenda-PIARC/Coronavirus-PIARC-and-Covid-19#section_s85015u221

COVID-19 PIARC 2020 Webinars

PIARC – World Road Association
www.piarc.org/en/News-Agenda-PIARC/Coronavirus-PIARC-and-Covid-19

Technical Reports on the COVID-19 Crisis

PIARC – World Road Association
https://www.piarc.org/en/News-Agenda-PIARC/Coronavirus-PIARC-and-Covid-19#section_s6dddc3F61

Spotlight: TPM Portal Resources

COVID-19 TPM IMPACTS VIDEOS NOW AVAILABLE

The TPM Pooled Fund has launched a new video series COVID-19 TPM Impacts on the TPM Portal. In the first installment, Daniela Bremmer, the Cooperative Transportation Development Manager from Washington State DOT and the Chair of AASHTO's Committee on System Mobility and Emerging Technologies, shares her thoughts and insights on COVID-19's impact on WSDOT operations, as well as short-term actions the agency has taken, and longer term impacts they anticipate related to COVID-19.

Access the first video: <https://www.youtube.com/watch?v=KoG1F0vWTGA&feature=youtu.be>

NEW ONLINE MULTI-OBJECTIVE DECISION ANALYSIS TRAINING AVAILABLE TO HELP AGENCIES PRIORITIZE INVESTMENTS!

- **How should we weigh agency objectives like enhancing safety and improving mobility when prioritizing projects?**
- **What are the steps involved in quantifying the expected outcomes of a project using performance measures?**
- **What is the right mix of projects, given available funding and our different objectives?**

These questions and many more are answered in the new online training *Performance-Based Prioritization Using MODA*. This training provides a structured approach for choosing between alternatives considering multiple objectives. It supports TPM within agencies as they work to align resource allocation decisions with agency goals and objectives.

This course was created to introduce TPM practitioners, including highway transportation planners and engineers, to the basics of MODA, including what it is, its benefits and challenges, the steps to implementation, and how it has been used by agencies to prioritize investments. This course has two lessons: 1. What is MODA? and 2. Steps in Implementing MODA.

- For more information, see the Performance-Based Prioritization Using MODA Promotional Flyer: <https://www.tpm-portal.com/wp-content/uploads/2020/10/MODA-training-flyer.pdf>
- To register for this training, search for 'MODA' on the TPM Training www.tpm-portal.com/training-hub
- View the resource page on the TPM <https://www.tpm-portal.com/resource/performance-based-prioritization-using-moda>
- You can also register for this course on the AASHTO Store <https://store.transportation.org/item/trainingdetail/4506>

FREE EDX TRAINING OFFER FOR TPM POOLED FUND MEMBER STATES!

The TPM Pooled Fund in partnership with the FHWA's TPM Team is launching a FREE, web-based training research pilot to build data expertise within the TPM community. For a limited time only, staff from TPM Pooled Fund member agencies can take courses in data analysis, business management, and other related areas through the online education provider edX. For more information, see the edX Training Promotional Flyer: <https://www.tpm-portal.com/wp-content/uploads/2020/08/edX-Pilot-Overview-1.pdf>

Those interested in participating should consult with their supervisors for any agency approvals necessary before signing up and commit to providing feedback on each course attended.

Space is limited, so take advantage of this exciting opportunity while it is available! Remember, your participation and feedback will help FHWA provide better training and resources for professionals like you in the future. To learn more email edXPilot@dot.gov today.

TPM PORTAL ORIENTATION VIDEOS TO HELP YOU GET THE MOST FROM THE TPM PORTAL

To assist in maximizing the use of the TPM Portal's tools, resources, and capacity building training and events, a new video series *TPM Portal Orientation Videos* is now available to guide you through using the site. Video 1 in the series, [A Site Overview: the Homepage and Main Menu](#) is now available for viewing on the [TPM Portal](#).

Please email contact@tpm-portal.com for additional videos you would like developed in upcoming months to help with navigation, making the most of the site.

Save the Date

WEBINARS

TPM Webinar 4:

System Performance Management – Focus on Accessibility

November 18, 2020, 2 PM – 3:30 PM EST

<https://register.gotowebinar.com/register/308158331779488523>

Transportation Asset Management (TAM) Webinar 47:

Re-Evaluating TAM Targets

December 16, 2020 2 PM - 3:30 PM EST

<https://attendee.gotowebinar.com/register/5068887551208856588>

VIRTUAL EVENTS

2020 AASHTO Virtual Annual Meeting

November 9, 2020 @ 8:00 AM – November 13, 2020 @ 5 PM EST

<https://meetings.transportation.org/event/2020-aashto-national-transportation-management-virtual-conference>

2021 TRB Annual Meeting – A Virtual Event

Committee Meetings

January 5, 2021 – January 8, 2021

January 11, 2021 – January 15, 2021

Sessions

January 21, 2021 – January 22, 2021

January 25, 2021 – January 29, 2021

Exhibits

January 21, 2021 – January 22, 2021

January 25, 2021 – January 29, 2021

<http://www.trb.org/AnnualMeeting/AnnualMeeting.aspx>